

The following amendments are made with respect to the claims in the International application PCT/DE2004/000089.

This listing of claims will replace all prior versions and listings of claims in this application.

Claims

1 (Original). A separating column, particularly for a miniaturized gas chromatograph, having a channel (2) for a fluid stream having molecules to be analyzed (analyte molecules), the channel (2) having opposing curves (3, 4) having turning points (7, 8), characterized in that the mean diameter of the channel (2) is greater than the path which an analyte molecule covers through diffusion on its way between two turning points (7, 7a; 8, 8a).

2 (Original). The separating column according to Claim 1, characterized in that the mean diameter of the channel (2) is at least ten times greater than the path which an analyte molecule covers through diffusion on its way between two turning points (7, 7a; 8, 8a).

3 (Currently amended). The separating column according to claim 1 one of the preceding claims, characterized in that the number of the turning points (7, 7a) is equal to the number of the turning points (8, 8a).

4 (Currently amended). The separating column according to claim 1 one of the preceding claims, characterized in that the separating column (1) has at least one loop (13) on whose legs (22, 23) the curves (3, 4) are provided.

5 (Currently amended). The separating column according to claim 1 one of the preceding claims, characterized in that the curves (3, 4) follow one another directly.

6 (Currently amended). The separating column according to [[one of]] Claim[[s]] 4 [[or 5]], characterized in that the legs (22, 23) run essentially parallel.

7 (Original). The separating column according to Claim 6, characterized in that the curves (3) on the legs (22, 23) are diametrically opposite one another, so that the curves (3) lie on a shared line (24) perpendicular to an axis (9) drawn through the leg (22) in the longitudinal direction.

8 (Original). The separating column according to Claim 6, characterized in that the curves (3) on the leg (22) each lie diametrically opposite the curves (4) on the neighboring leg (23).

9 (Currently amended). The separating column according to claim 1 one of the preceding claims, characterized in that the having legs (22, 23) that are connected by linear sections (12, 19, 17, 20).

10 (Currently amended). The separating column according to claim 6 one of Claims 1 through 8, characterized in that the having legs (22, 23) that are connected to one another by curves (15, 18, 16, 26, 27, 28).

11 (Currently amended). A micro-chromatograph, particularly a gas micro-chromatograph, characterized in that the micro-chromatograph has at least one separating column (1) according to one of Claims 1 through 10 separating column having a channel (2) for a fluid stream having molecules to be analyzed (analyte molecules), the channel (2) having opposing curves (3, 4) having turning points (7, 8), characterized in that the mean diameter of the channel (2) is greater than the path which an analyte molecule covers through diffusion on its way between two turning points (7, 7a; 8, 8a).

12 (Currently amended). The micro-chromatograph according to Claim 11, characterized in that the micro-chromatograph has multiple separating columns (1) on a shared semiconductor chip, particularly a silicon chip.

13 (Original). The micro-chromatograph according to Claim 12, characterized in that the separating columns (1) are each provided with stationary phases which have different chemical and/or physical properties.

14 (Currently amended). The micro-chromatograph according to [[one of]] Claim[[s]] 12 [[or 13]], characterized in that the separating columns (1) on the chip are connected to one another in series and/or in parallel.

15 (New). The separating column according to Claim 5, characterized in that the legs (22, 23) run essentially parallel.

16 (New). The separating column according to Claim 15, characterized in that the curves (3) on the legs (22, 23) are diametrically opposite one another, so that the curves (3) lie on a shared line (24) perpendicular to an axis (9) drawn through the leg (22) in the longitudinal direction.

17 (New). The separating column according to Claim 15, characterized in that the curves (3) on the leg (22) each lie diametrically opposite the curves (4) on the neighboring leg (23).

18 (New). The micro-chromatograph, according to Claim 12, wherein said semiconductor chip is a silicon chip.